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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,710	09/25/2003	Brian Eric Bakke	ROC920030249US1	6124

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IBM CORPORATION  
ROCHESTER IP LAW DEPT. 917  
3605 HIGHWAY 52 NORTH  
ROCHESTER, MN 55901-7829

EXAMINER
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DALEY, CHRISTOPHER ANTHONY

ART UNIT	PAPER NUMBER
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2111

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/670,710

Applicant(s)

BAKKE ET AL.

Examiner

Christopher A. Daley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1 – 12 are pending.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Grieshaber et al (US6586106) hereinafter Grieshaber.

4. As to claims 1, 7, and 11, Grieshaber discloses a method and apparatus, and network for implementing resilient connectivity in a Serial Attached SCSI (SAS) domain comprising the steps of:

connecting a first edge expander to a first port of a plurality of SAS devices for enabling communications between each of said plurality of SAS devices through said first edge expander; (Grieshaber teaches in figure 4 of connecting the expander 412 to port 1 labeled 402 enabling communication with a plurality of devices that would be coupled to port 1, COL. 5, lines 40 – 50)

connecting a second edge expander to a second port of said plurality of SAS devices for enabling communications between each of said plurality of SAS devices through

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said second edge expander; (Grieshaber teaches of connecting port 2, 404 to a second expander 422 to enable communication with any other device connected to port 2).

and connecting together a subtractive routing port of each of said first edge expander and said second edge expander for enabling communications between each of said plurality of SAS devices via said first ports and said second ports of said plurality of SAS devices. (Grieshaber teaches in figure 5 of logic with the expander that affords the routing signals from expander 1 to expander 2 through the internal SCSI bus 530, COL. 6, lines 8 – 26).

5. As to claims 2 and 8, Grieshaber discloses a method and apparatus for implementing resilient connectivity in a Serial Attached SCSI (SAS) domain wherein the step of connecting said first edge expander includes the step of connecting respective direct routing ports of said first edge expander to said first port of said plurality of SAS devices; (Grieshaber teaches of a SAS system in which a plurality of SAS devices such as host device 416 of figure 4 is connected to port 1, 402, COL. 5, lines 40 – 43) and wherein the step of connecting said second edge expander includes the step of connecting respective direct routing ports of said second edge expander to said second ports of said plurality of SAS devices. (Grieshaber teaches of connecting a plurality of SAS devices such as host device 426 to port 2, 404, Col. 5, lines 40 – 43).

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6. As to claims 3, 9, and 12, Grieshaber discloses a method, apparatus, and network for implementing resilient connectivity in a Serial Attached SCSI (SAS) domain includes the step of ganging together multiple point-to-point links to form said subtractive routing ports of said first edge expander and said second edge expander for enabling multiple concurrent connections with said subtractive routing ports.

(Grieshaber teaches in figure 5 of said point-to-point configuration in logical bus isolator logic 542, COL. 7, lines 49 – 67).

7. As to claims 4-6 and 10, Grieshaber discloses a method and apparatus for implementing resilient connectivity in a Serial Attached SCSI (SAS) includes the step of utilizing said subtractive routing ports of said first edge expander and said second edge expander for communicating from said first ports of said plurality of SAS devices to said second ports of said plurality of SAS devices. (Grieshaber teaches of internal bus 630 of figure 6 coupling the routing ports of said expanders 612 and 622. Grieshaber teaches of enabling the communication channels based on the feedback from the enclosure monitors 614, and 624 on said ports, COL. 9, lines 30 – 47).

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**Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A. Daley whose telephone number is 571 272 3625. The examiner can normally be reached on 9 am. - 4p m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 571 272 3632. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CAD

CAD  
7/08/2005



**TIM VO**  
**PRIMARY EXAMINER**